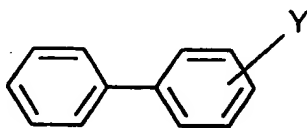


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Previously amended): A non-aqueous electrolytic solution which comprises a non-aqueous solvent and an electrolyte which further contains 0.001 to 0.8 weight % of a biphenyl derivative having the following formula:



in which Y represents a hydroxyl group, an alkoxy group, a hydrocarbyl group, a hydrogen atom, an acyloxy group, an alkoxycarbonyloxy group, or an alkylsulfonyloxy group.

Claim 2 (Canceled).

Claim 3 (Previously amended): The non-aqueous electrolytic solution of claim 1, wherein the amount of the biphenyl derivative is in the range of 0.01 to 0.5 weight %.

Claim 4 (Canceled).

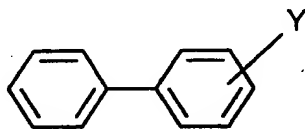
Claim 5 (Original): The non-aqueous electrolytic solution of claim 1, wherein the non-aqueous solvent comprises a combination of a cyclic carbonate and a linear chain carbonate.

Claim 6 (Previously presented): The non-aqueous electrolytic solution of claim 1, wherein the non-aqueous solvent comprises a combination of a cyclic carbonate and a linear chain carbonate.

Claim 7 (Original): The non-aqueous electrolytic solution of claim 1, wherein the non-aqueous solvent comprises a high dielectric constant solvent which is selected from the group consisting of ethylene carbonate, propylene carbonate, and butylene carbonate, and a low viscosity solvent which is selected from the group consisting of dimethyl carbonate, methyl ethyl carbonate, diethyl carbonate, tetrahydrofuran, 2-methyltetrahydrofuran, 1,4-dioxane, 1,2-dimethoxyethane, 1,2-diethoxyethane, 1,2-dibutoxyethane, γ -butyrolactone, acetonitrile, methyl propionate, and dimethylformamide.

Claim 8 (Previously amended): The non-aqueous electrolytic solution of claim 1, wherein the non-aqueous solvent comprises a high dielectric constant solvent which is selected from the group consisting of ethylene carbonate, propylene carbonate, and butylene carbonate, and a low viscosity solvent which is selected from the group consisting of dimethyl carbonate, methyl ethyl carbonate, diethyl carbonate, tetrahydrofuran, 2-methyltetrahydrofuran, 1,4-dioxane, 1,2-dimethoxyethane, 1,2-diethoxyethane, 1,2-dibutoxyethane, γ -butyrolactone, acetonitrile, methyl propionate, and dimethylformamide.

Claim 9 (Previously amended): A lithium secondary battery comprising a positive electrode, a negative electrode, and a non-aqueous electrolytic solution which comprises a non-aqueous solvent and an electrolyte which further contains 0.001 to 0.8 weight % of a biphenyl derivative having the following formula:



in which Y represents a hydroxyl group, an alkoxy group, a hydrocarbyl group, a hydrogen atom, an acyloxy group, an alkoxycarbonyloxy group, or an alkylsulfonyloxy group.

Claim 10 (Canceled).

Claim 11 (Previously presented): The non-aqueous electrolytic solution of claim 1, which further contains a high dielectric constant solvent selected from the group consisting of ethylene carbonate, propylene carbonate and butylene carbonate, and a low viscosity solvent selected from the group consisting of dimethyl carbonate, methyl ethyl carbonate, diethyl carbonate, tetrahydrofuran, 2-methyltetrahydrofuran, 1,4-dioxane, 1,2-dimethoxyethane, 1,2-diethoxyethane, 1,2-dibutoxyethane, γ -butyrolactone, acetonitrile, methyl propionate and dimethylformamide.

Claim 12 (Previously presented): The non-aqueous electrolytic solution of claim 11, wherein the high dielectric constant solvent and the low viscosity solvent are contained in a ratio of 1:9 to 4:1 in terms of the ratio of former:latter.

Claim 13 (Previously presented): The non-aqueous electrolytic solution of claim 1, which further contains vinylene carbonate or 1, 3-propanesultone.

Claim 14 (Previously presented): The non-aqueous electrolytic solution of claim 1, wherein the biphenyl derivative is biphenyl, o-terphenyl, m-terphenyl, or p-terphenyl.

Claim 15 (New): A method of operating a lithium secondary battery in a voltage range having a maximum operating voltage exceeding 4.2 V, the lithium secondary battery comprising a positive electrode, a negative electrode, and a non-aqueous electrolytic solution comprising a cyclic carbonate, a linear chain carbonate and an electrolyte which further contains 0.001 to 0.8 weight % of a biphenyl derivative selected from the group consisting of biphenyl, 4-methoxybiphenyl, 4-hydroxybiphenyl, o-terphenyl, 4-biphenylyl acetate, 4-biphenylyl methylcarbonate, and 4-methanesulfonyloxybiphenyl.

Claim 16 (New): The method of claim 15, wherein the amount of the biphenyl derivative is in the range of 0.01 to 0.5 weight %.

Claim 17 (New): The method of claim 15, wherein the biphenyl derivative is biphenyl.

Claim 18 (New): The method of claim 15, wherein the non-aqueous electrolytic solution furthermore contains at least one compounds selected from the group consisting of triethyl phosphate, tributyl phosphate, trioctyl phosphate, vinylene carbonate, and 1, 3-propanesultone.